

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

RAJYA SABHA
UNSTARRED QUESTION NO. 2255
TO BE ANSWERED ON THE 05/08/2022

POST-HARVEST LOSSES OF AGRICULTURAL PRODUCES

2255. SHRI MUKUL BALKRISHNA WASNIK:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether Government has conducted any survey to assess the extent of post-harvest losses of crops including perishable agricultural produces incurred during the last five years;
- (b) if so, the details of such losses, year-wise; and
- (c) the steps taken by Government to prevent post-harvest losses?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE
(SHRI NARENDRA SINGH TOMAR)

(a) & (b): The All India Coordinated Research Projects (AICRP) on Post-Harvest Engineering and Technology, scheme under Indian Council of Agricultural Research (ICAR) - Central Institute of Post Harvest Engineering & Technology(CIPHET), Ludhiana had conducted two studies on Assessment of Quantitative Harvest and Post-Harvest Losses of Major Crops and Commodities in India and reports published in 2012 and 2015. As per the study report 2013-14, the harvest and post-harvest losses of major cereals ranged from 4.65 - 5.99 %, pulses ranged from 6.36 - 8.41 %, oilseeds ranged from 3.24 - 9.96%, fruits ranged from 6.70 % to 15.88%; for vegetables the losses ranged from 4.58% to 12.44% for fish, meat and milk the losses were 10.52%, 2.71% and 0.92% respectively. The detail crop/commodity wise losses are at Annexure.

(c): The following steps have been taken by the Government to prevent post-harvest losses :-

- i. ICAR-CIPHET has developed nearly 120 technologies containing several equipment for agricultural produce processing, structures for safe handling and shelf-life enhancement of farm produce, process protocols for value added products, novel products and technologies for farmers and processors. ICAR-CIPHET has established around 260 agro-processing centres (APC) in production catchment through its various schemes, for processing and value addition to farm produce thus improving farmer's income and reducing post-harvest losses.
- ii. Further, ICAR institutes provides hands on trainings/ demonstrations to farmers, entrepreneurs and self-help groups engaged in agriculture and related activities to create awareness about post-harvest technology. These activities were found helpful in reduction of post-harvest losses, achieving timeliness post-harvest operations and value addition and reduction of drudgery.

- iii. Government is implementing Agricultural Marketing Infrastructure (AMI), a sub-scheme of Integrated Scheme for Agricultural Marketing (ISAM) under which assistance is provided for construction/ renovation of godowns/ warehouses in the rural areas in the States to enhance the storage capacity for agriculture produce.
- iv. Government is also implementing, Agriculture Infrastructure Fund (AIF) to provide medium to long term financing facilities for creation of post-harvest management infrastructure and community farming assets. The scheme aims at developing Agri-infrastructure at farm gate level in order to reduce post-harvest losses, to enhance productivity, improve resource utilization, technology adoption, better price realization and accessibility of market to the farmers.
- v. Furthermore, as informed by Ministry of Railways, since the launch of Kisan Rail service on 7th August 2020 and upto 30th June 2022, Railways have operated around 2,359 Kisan Rail services, transporting approximately 7.9 lakh tonnes of perishables including onion, banana, potato, ginger, garlic, mango, grapes, pomegranate, oranges, chikoo, lemon, capsicum, cabbage, cauliflower, and other fruits and vegetables.
- vi. Under Rashtriya Krishi Vikas Yojana - Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR) major focus is on pre & post-harvest infrastructure, besides promoting agri-entrepreneurship and innovations.
- vii. Department of Agriculture & Farmers Welfare is implementing Mission for Integrated Development of Horticulture (MIDH) under which financial assistance is provided for various horticulture activities including setting up of cold storages in rural areas. The component is demand/entrepreneur driven for which Government assistance in the form of credit linked back ended subsidy is available at the rate of 35% of the project cost in general areas and 50% of the project cost in hilly and scheduled areas.
- viii. Besides, National Horticulture Board (NHB) is implementing a scheme namely “Capital Investment Subsidy for Construction/Expansion /Modernization of Cold Storages and Storages for Horticulture Products”. Under the scheme, credit linked back-ended subsidy at the rate of 35% of the capital cost of the project in general areas and 50% in case of North East, hilly & scheduled areas for construction/expansion/modernization of cold storage and Controlled Atmosphere (CA) storage of capacity above 5000 MT and up to 10000 MT is available. In case of North East region, the units with capacity above 1000 MT are also eligible for assistance.
- ix. Ministry of Food Processing Industries (MOFPI) is implementing a Scheme for Integrated Cold Chain, Value Addition and Preservation Infrastructure as one of the component of Pradhan Mantri Kisan Sampada Yojana with the objective of reducing post-harvest losses of horticulture and non-horticulture produce and providing remunerative price to farmers for their produce. Under the scheme, Ministry provides financial assistance in the form of grant-in-aid at the rate of 35% for general areas and 50% for North East and Himalayan States, ITDP areas and Islands for storage and transport infrastructure and at the rate of 50% and 75% respectively for value addition and processing infrastructure subject to a maximum grant-in-aid of Rs. 10 crore per project for setting up integrated cold chain projects including irradiation facility. Standalone cold storages are not covered under the Scheme.

Crop/commodity wise losses

S. No.	Crop	Loss in transport (%)	Loss in storage (%)	Overall Total Loss (%) (Farm operation + transport + storage)
1.	Paddy	0.09	0.86	5.53
2.	Wheat	0.08	0.86	4.93
3.	Maize	0.13	0.75	4.65
4.	Bajra	0.15	0.79	5.23
5.	Sorghum	0.09	1.21	5.99
6.	Pigeon pea	0.19	1.67	6.36
7.	Chick pea	0.35	1.18	8.41
8.	Black gram	0.15	1.18	7.07
9.	Green gram	0.14	1.24	6.6
10.	Mustard	0.14	0.22	5.54
11.	Cotton seed	0.14	0.54	3.08
12.	Soybean	0.14	1.00	9.96
13.	Safflower	0.17	0.44	3.24
14.	Sunflower	0.07	1.61	5.26
15.	Groundnut	0.12	0.95	6.03
16.	Apple	0.42	1.31	10.39
17.	Banana	1.91	1.72	7.76
18.	Citrus	1.65	2.14	9.69
19.	Grapes	0.98	2.11	8.63
20.	Guava	1.21	3.98	15.88
21.	Mango	1.04	2.24	9.16
22.	Papaya	0.92	2.58	6.7
23.	Sapota	1.70	2.31	9.73
24.	Cabbage	1.02	2.56	9.37
25.	Cauliflower	0.92	2.00	9.56
26.	Green pea	0.61	1.73	7.45
27.	Mushroom	0.77	2.19	9.51
28.	Onion	0.51	2.16	8.20
29.	Potato	0.72	0.78	7.32
30.	Tomato	1.75	3.03	12.44
31.	Tapioca	0.61	1.36	4.58

Source: Jha, SN, Vishwakarma, RK, Ahmad T, Rai A and Dixit A K (2015). *Report on Assessment of Quantitative Harvest and Post-Harvest Losses of Major Crops and Commodities in India*. ICAR-All India Coordinated Research Project on Post-Harvest Technology, ICAR-CIPHET, P.O.-PAU, Ludhiana- 141004.
